REMARKS

Claims 34-37 and 43-50 were pending. Claims 43-50 are cancelled by this Amendment. As a result, claims 34-37 remain pending.

Interview Summary

Applicants thank Examiner Sheleheda and Supervisory Patent Examiner Kelly for the courtesies extended during an interview with the undersigned attorneys at the Office on January 18, 2007. During the interview, the parties discussed whether Heinonen could be modified to employ a wireless Bluetooth connection between the mobile phone and the interface, and in that respect whether Heinonen suggests the separability of data and power connections. The undersigned attorneys made the points repeated below concerning connector 32 to show that Heinonen does not make such a suggestion and for that reason, and the other reasons set forth below, that consequently the Bluetooth modification is unobvious. The Examiners agreed to reconsider the rejection in view of the discussion.

Claim Rejections – 35 USC § 103(a)

Independent claim 34 and dependent claims 35-37 were rejected under 35 U.S.C. § 103(a) as reciting subject matter unpatentable over EP-0804030-A2) to Heinonen et al. ("Heinonen") in view of U.S. Pat. No. 6,202,060 to Tran ("Tran") (*see* Office Action mailed Nov. 11, 2006, p. 7, paragraph 7).

The Bluetooth Protocol Limitation

The Examiner recognized that Heinonen did not disclose the independent claim 34 limitation "transmitting the signal in a format that conforms to a Bluetooth-protocol as an output signal from the mobile phone," but suggested that that limitation was provided by the combination of Tran (wireless transmission of the signal from the mobile phone) and Official Notice (Bluetooth as a wireless protocol).

The Bluetooth Protocol Transmits Only Data, and Not Power, But Heinonen Requires That Both Data and Power Be Transferred Through the Connector

Respectfully, Applicants suggest, this combination is improper. It would not be obvious to modify Heinonen to use a Bluetooth protocol for communications between the mobile phone and the remainder of the system. In Heinonen the mobile phone is connected through an accessory that charges the mobile phone as well as communicates with it. But the Bluetooth protocol is a communications protocol and cannot be used to transmit power. Hence, replacing the direct connection of Heinonen with a Bluetooth-protocol wireless connection would render Heinonen inoperable.

Heinonen repeatedly makes clear that interface 7 of Figure 1 with which the mobile phone connects is a "charger accessory." See col. 3, lines 23, 27, 36, 43, 44, 50, 52; col. 4, lines 4, 40-48, 58; col. 5, lines 3, 34; col. 6, lines 3, 55, 56; Figure 3.

Heinonen identifies Figure 3 as "a component of a home terminal equipment according to the invention," (col. 2, lines 44-46) and identifies the "charger accessory 30" of Figure 3 as "reference 7 in Fig. 1" (col. 3, lines 44-45).

In Figure 3, it is clear that both data and power are transmitted together to the mobile phone from the charger accessory, and that neither is optional. In Fig. 3, the mobile phone is connected to connector 32. Figure 3 explicitly shows connector 32 to be forwarding *both GSM data and DC power* to the mobile phone, and receiving GSM data from the mobile phone.[1] Figure 3 shows a DC charger 38 as an integral part of the charger accessory 30, as well as showing numerous components (such as field registers and data registers) that handle data. There is no suggestion in Figure 3 that the power and the data can be communicated over separate pathways to the mobile phone, as would be required if the Bluetooth protocol were used to transmit the data, or that transmission of the power can be omitted. As noted, Figure 3 explicitly shows data and power being transmitted together.

[1] The acronym "GSM" stands for "Groupe Spécial Mobile," or in English "Global System for Mobile Communications" and is a standard for mobile phone communications.

Nothing in the Heinonen specification in any way changes this result. The specification *explicitly* recites at col. 3, lines 50-52 that the mobile phone is connected to the charger accessory through the connector 32. No separate connection for data transmission is disclosed or suggested. Moreover, the specification describes at length (col. 3, line 52 to col. 4, line 20) how the charger accessory handles data, without once suggesting that data manipulation and communication could be omitted from the charger, and performed by another component.

How Heinonen's Charger May Supply Power

The specification makes clear that the power to the mobile phone may be derived in two ways: (1) a power supply internal to the charger accessory; or (2) a power supply input to the charger accessory. See col. 4, lines 4-7 ("[t]he charger accessory further comprises ...a power supply 38 or power supply input"). This choice is presented again and elaborated upon at col. 4, lines 40-48:

> For the accessory 30 to be able to serve as a charger for the mobile phone's battery, the power supply 38 included in it has also got a feed voltage connection to the connector 32. The accessory 30 may include only a power supply input, whereby the accessory may be like a desktop stand for receiving a mobile phone at connector 32 and power from an external charger via power supply input 38.

This language reiterates the two options presented at lines 4-7. First, the charger accessory may include a power supply 38. Alternatively, however, the charger may include *only* a power supply input, in which case there must be an external power source connected to the charger so that it can feed power to the mobile phone. The "only" refers to the fact that there may be "only" a power supply input rather than a complete power supply in the charger accessory. The sentence in which it appears is completing the presentation of the alternatives, by suggesting that less than a full power supply is required. The sentence is *not* suggesting that the charger need only handle power, and not data; such a construction would render utterly superfluous all of the components set forth in Figure 3 and discussed in the specification which are incorporated in the charger accessory and which handle data. Nowhere is it suggested that those components and functions are

optional. Indeed, the very sentence that precedes the quoted excerpt states that "[t]he microprocessor [in the charger accessory] can direct the necessary data *via the connector 32* to the mobile phone connected to it." (col. 4, lines 38-40) Again, there is no suggestion that there could be an alternative communications channel to carry the data, while the connector 32 carries only power.

The Data Adapter Discussion in Heinonen Does Not Suggest A Different Result

Finally, the reference to and discussion of a "data adapter" at col. 4, lines 48-55 in no way contradicts this analysis. "Data adapter" is not defined in the specification, but its meaning may be readily inferred. To "adapt" is "to make suitable to or fit for a specific use or situation," according to the American Heritage® Dictionary of the English Language, 4th edition. The term "data adapter" thus means a component that makes data suitable for a specific use; it may convert data from one format to another, so that data generated in one device may be read in another. There is no suggestion in the meaning that it serves a *communications* function. Moreover, the specification is completely consistent with this understanding. It recites that

> [t]he connector 32 may include a data adapter or a data adapter may be connected between connector 32 and the mobile phone for adapting data for sending it over a mobile phone system ... and also for adapting data received over the mobile phone system for a format suitable for graphics chip 40 [which is in the charger accessory 30]. (col. 4, lines 48-53)

This passage is clearly consistent with the above definition of data adapter, in that it states that the function of the data adapter is (1) to *adapt* data (from the charger accessory) for sending out over a mobile phone system, and (2) to *adapt* data (from the mobile phone system) for manipulation in the charger accessory. This is a conversion function. There is no suggestion here that the data adapter is to *communicate* as opposed to *adapt* data. (The "sending it over a mobile phone system", for example, is the *purpose* for which the adaptation is made, but is not part of the adapter's function.)

The discussion of the location of the data adapter in this passage also confirms that the data *must* pass through the connector 32 (and thus travel with the power). The data

adapter may be in two places according to the specification: (1) included in the connector, or (2) between the connector and the mobile phone. But *in each case, the data must go through the connector 32*. There is no suggestion in this passage that the data somehow can make an end run around connector 32.

The specification notes that "[s]uch a data adapter is known e.g. as data cards for connecting a computer to a mobile phone." (col. 4, lines 54-55) But this passing statement is insufficient to overcome the above clear discussion. It is necessary to adapt data from one format to another when connecting a computer to a mobile phone, and hence this sentence is completely consistent with the understanding that that is the function the data adapter serves on the data card as elsewhere. Neither here nor anywhere else does the Heinonen specification suggest that data and power transmission should be separated, and that there can or should be a second communications channel devoted to the data. Moreover, the clear and explicit statement in the Heinonen specification that the data adapter either can be included in the connector, or can be between the connector and the mobile phone, makes clear that the data adapter cannot be read as being a communications channel for data that replaces the connector 32. As noted above, the two configurations for the location of the data adapter explicitly presented by the specification at col. 4, lines 48-53 both *require* that the data go through the connector.

The Insertion of the Bluetooth Protocol Into Heinonen Would Be Improper Hindsight

In Heinonen the charger accessory is described in great detail, and the transmission of power and data are intimately linked. For Heinonen the use of only a single interface to transmit both power and data clearly is considered a basic feature of the invention. In this context, it would be the worst kind of hindsight to combine all of the other features of the Heinonen invention with the use of the Bluetooth protocol for data transmission between the mobile phone and the remainder of the system. There is no hint of any such second interface in Heinonen, and as noted to introduce it would render inoperable one of the significant features of the Heinonen invention: the use of a charger accessory to transmit both data and power to the mobile phone through a single interface.

Accordingly, Applicants respectfully suggest that the Examiner should withdraw the rejection of claim 34, and claims 35-37 that depend therefrom. The claims are not rendered obvious by the introduction of wireless Bluetooth communications from Tran and Official Notice into Heinonen.

CONCLUSION

In view of the above remarks, Applicants believe pending Claims 34-37 are in condition for allowance.

Applicants invite the Examiner to contact the Applicants' Attorney if questions arise regarding this Response or if issues remain prior to allowance.

Respectfully submitted,

Date: January 23, 2007
Customer No: 25181
Patent Group
Foley Hoag, LLP
155 Seaport Blvd.
Boston, MA 02210-2600

By /Stephen B. Deutsch/
Stephen B. Deutsch, Reg. No. 46,663
Scott E. Kamholz, Reg. No. 48,543
FOLEY HOAG LLP
155 Seaport Blvd
Boston, Massachusetts 02210
Tel. No. (617) 832-1118
Fax. No. (617) 832-7000
Attorneys for Applicants